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basic imagery interpretation report

Plesetsk Space Launch Site 27 (S)

MISSILE RANGES: STRATEGIC SSM SPACE FACILITIES

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INSTALLATION OR ACTIVITY NAME	COUNTRY
Plesetsk Space Launch Site 27	UR

UTM COORDINATES	GEOGRAPHIC COORDINATES	CATEGORY	BE NO	COMIREX NO	NIETB NC
NA	62-54-23N 040-47-15E				

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MAP REFERENCE

DMA, USATC, Series 200, Sheet 0102-09, scale 1:200,000

LATEST IMAGERY USED	NEGATION DATE If required
See "Abstract"	NA

ABSTRACT

1.   (S/D) This report describes Plesetsk Space Launch Site 27, USSR, from⬚ 25X1
⬚ the information cutoff date. The site was constructed just north of the former Launch Site 8 25X1
and incorporates many of the original buildings of Launch Site 8.

2.   (TSR) The SL-14 is the launch vehicle used at launch site 27. The initial launch from Site 27 was
on⬚ 25X1

3.   (U) This report includes one location map, four photographs, and one table.

INTRODUCTION

4.   (TSR) Plesetsk Space Launch Site 27 (Figure 1) is near the center of Plesetsk Missile/Space Test Center SSM rangehead, immediately north of deactivated Launch Site 8. Initial clearing for the site began between May and September 1971, and the site was externally complete by May 1978. The initial satellite launch (Cosmos 921) was from the south pad and occurred on⬚ The initial launch 25X1 from the north pad occurred on⬚ Cosmos 1151). The launch vehicle used for both of these 25X1 launches was the SL-14.¹

BASIC DESCRIPTION

5.   (S/D) Launch Site 27 is a road- and rail-served space launch site and consists of three functional areas: a launch area, an assembly area, and a housing/support area (Figure 2). Table 1, which is keyed to Figures 3, 4, and 5, presents mensural and chronological data on the structures in the three areas.

Launch Area

6.   (TSR) The launch area (Figure 3) is fence secured and consists of two identical rail-served launch pads, each with a 28-meter-long, in-pad erector arm and below-pad exhaust ducts; two earth-mounded control buildings; two earth-mounded propellant storage areas; an unidentified earth-mounded building containing two large tanks⬚ and several support buildings. The two earth-covered 25X1 propellant storage areas are designated east and west. Propellant storage is provided by eight tanks, five at the east area and three at the west area, each 17 meters long and⬚ in diameter. Pressurized gas storage 25X1 tanks⬚ in diameter, probably for fast-fill loading, are located at each propellant 25X1 area. Thirteen of these tanks are at the east area and nine are at the west area. The launch pads, both propellant storage areas, and the two launch control buildings are interconnected by earth-covered conduits. Separation distance between the two in-line pads is 222 meters, and their orientation is⬚ Also in the launch 25X1 area are lightning arrester towers with an average height of 62 meters and floodlight towers with an average height of 54 meters.

Assembly Area

7.   (S/D) The assembly area (Figure 4) consists of a large rail-through (three tracks) clerestory assembly building with a high-bay center section (item 10). Two side bays adjoin the high-bay section. Both of the former Launch Site 8 SS-8 ready buildings (currently airframe storage buildings, items 9 and 18), as indicated by the rail connecting system, are utilized to support Site 27 operations. A large, L-shaped building (item 8) with two offset rail-in bays is beside the rail line connecting the large assembly building with the pad area. Item 8 is used for payload assembly.
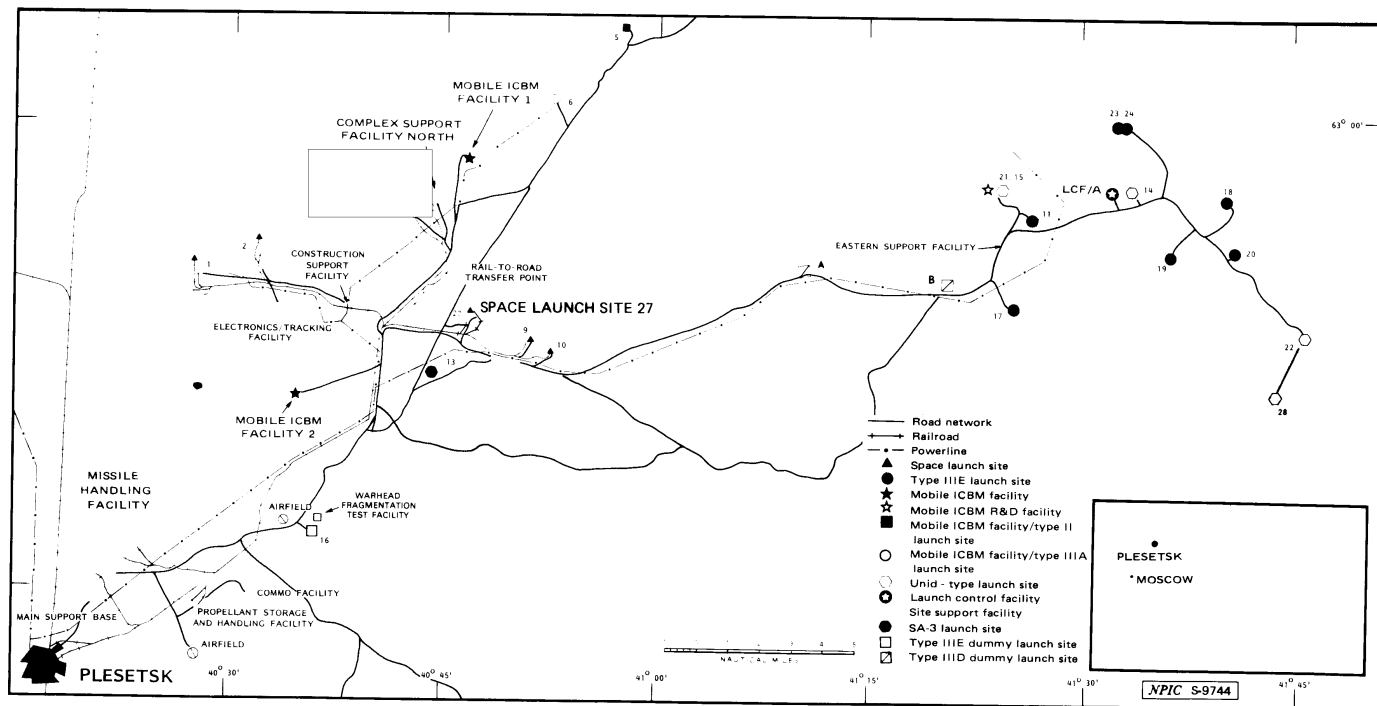
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FIGURE 1. LOCATIONS OF FACILITIES AT THE PLESETSK MISSILE/SPACE TEST CENTER SSM, USSR

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Table 1.
Buildings and Structures at Plesetsk Space Launch Site 27
This table in its entirety is classified SECRET/WNINTEL

Item	Function	Dimensions (m)			Floorspace (sq m)	Year Complete*	Comments
		L	W	H			
Launch Area (keyed to Figure 3)							
1	Support bldg	5	4	3	20	1975	
2	Support bldg	5	4	3	20	1975	
3	Support bldg	4	4	3	16	1978	
4	Support bldg	4	3	3	12	1978	
5	Support bldg	7	3	3	21	1978	
6	Support bldg	9	7	4	63	1977	
7	Horizontal storage tank	9	3	3	—	1979	Volume 47 cu m
Assembly Area (keyed to Figure 4)							
8	Payload assembly bldg						
a		50	17	11	850	1976	
b	Engineering space	26	12	11	624	1976	2 stories
9	Airframe stor bldg	40	30	8	1,200	1961	
10	Assembly bldg						
a	High-bay section	82	32	23	2,624		
b	Engineering space	82	10	23	3,280		4 stories
c	Engineering space	82	10	23	3,280		4 stories
11	Admin bldg	26	11	13	1,144	1975	4 stories
12	Storage tanks (2)						
a			22 diam	5	—	1961	Bunkered
b			22 diam	5	—	1961	Bunkered
13	Support bldg	19	7	5	133	1961	
14	Support bldg	13	13	6	169	1961	
15	Support bldg						
a		26	14	5	364	1961	
b		14	11	8	154	1961	
16	Storage bldg	16	13	3	208	1961	
17	Support bldg	17	9	4	153	1961	
18	Airframe stor						
a		40	30	8	1,200	1961	
b	Airframe stor	26	13	8	338	1978	
19	Support bldg	27	9	6	243	1973	
20	Security bldg	29	13	5	377	1976	
21	Guard shack	5	6	3	30	1976	
22	Support bldg	25	10	5	250	1976	
23	Storage tanks (2)						
a			16 diam	9	—	1976	Volume 219 cu m
b			16 diam	9	—	1976	Volume 219 cu m
24	Security bldg	35	19	6	665	1976	

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Table 1 (continued)

Item	Function	Dimensions (m)			Floorspace (sq m)	Year Complete*	Comments
		L	**W**	**H**			
Housing/Support Area (keyed to Figure 5)							
25	Personnel support						
a		22	10	7	440	1961	2 stories
b		30	13	7	390	1961	
c		13	4	8	104	1961	2 stories
d		12	7	7	84	1961	
e		23	11	4	253	1961	
f		23	11	4	253	1961	
26	Vehicle stor	15	16	4	240	1978	
27	Messhall	27	19	7	513	1961	
28	Barracks	43	14	8	1,204	1961	2 stories
29	Infirmary	43	14	8	1,204	1961	2 stories
30	Barracks	43	14	8	1,204	1961	2 stories
31	Support	10	3	3	30	1961	
32	Support	24	10	5	240	1961	
33	Messhall	49	19	5	931	1961	
34	Barracks	40	16	8	1,280	1961	2 stories
35	Barracks	40	16	8	1,280	1961	2 stories
36	Barracks	40	16	8	1,280	1961	2 stories
37	Support	13	7	4	91	1961	
38	Support	10	6	4	60	1961	
39	Food stor	19	14	2	266	1961	
40	Bldg footings	44	11	—	—	1961	Bldg razed in 1979
41	Admin bldg	44	12		528	1961	
42	Barracks	39	12		468	1961	
43	Support	25	13	4	325	1961	
44	Support	14	14	5	196	1961	
45	Admin bldg	39	12	4	468	1961	
46	Admin bldg	27	13	8	702	1961	2 stories
47	Admin bldg	47	12	4	564	1961	
48	Unid structure	7 diam		4	—	1961	
49	Unid structure	7 diam		4	—	1961	
50	Storage bldg	48	20	6	960	1961	
51	Steamplant						
a		26	11	13	286	1961	
b	Addition	26	11	13	286	1974	
52	Support bldg	9	8	4	72	1961	
53	POL stor tanks (2)						
a		12 diam		8	—	1961	Volume 156 cu m
b		12 diam		8	—	1961	Volume 156 cu m
54	Vehicle stor	37	25	6	925	1961	
55	Vehicle stor	42	25	6	1,050	1961	
56	Support bldg	8	5	3	40	1961	
57	Vehicle stor	37	25	6	925	1961	
58	Vehicle stor	37	25	6	925	1961	
59	Vehicle stor	13	10	4	130	1961	
60	Vehicle support	28	8	4	224	1961	
61	Vehicle support	29	8	4	232	1961	
62	Vehicle stor	37	25	6	925	1961	
63	Vehicle stor	37	25	6	925	1961	
64	Vehicle stor	49	19	6	931	1961	
65	Vehicle stor	49	19	6	931	1961	
			Total floorspace		41,803		

*Buildings complete in/or before 1961 are indicated as complete in 1961.

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Housing/Support Area

8. (S/D) The housing/support area (Figure 5) for Site 27 is the original housing/support area of former Launch Site 8.[2] Changes to the original housing/support area consist of an addition to the original steamplant and the razing of an administration building. The addition to the steamplant approximately doubled the capacity of the plant.

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REFERENCES

IMAGERY

(S/D) All applicable satellite imagery acquired between ⬚ the information cutoff date, was used in the preparation of this report.   **25X1**

MAPS OR CHARTS

DMA, US Air Target Chart, Series 200, Sheet 0102-09, scale 1:200,000 (UNCLASSIFIED)

DOCUMENTS

1. FTD. ⬚ DST-1070S-102-80-SAO, *Plesetsk Missile and Space Range (U),* Apr 80 (TOP SECRET ⬚   **25X1**
                                                                                                   25X1
                                                                                                   25X1

*Extracted material is classified TOP SECRET R.

RELATED DOCUMENTS

FTD. ⬚ RFB-22/0007/77, *Launch Pad Substructure (U), Plesetsk Missile and Space Center (PMSC) Launch Site 27,* Mar 77 (TOP SECRET R)   **25X1**

FTD. ⬚ RFB-22/0025/75, *Launch Pad Substructure, Plesetsk Missile and Space Center (PMSC) Launch Site 27,* Aug 75 (TOP SECRET R)   **25X1**

REQUIREMENT

COMIREX P02
Project 200006 DP

(S) Comments and queries regarding this report are welcome. They may be directed to ⬚ Soviet Strategic Forces Division, Imagery Exploitation Group, NPIC, ⬚   **25X1**
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